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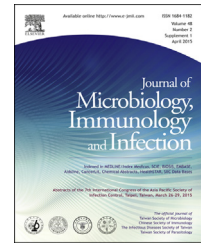
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KEYNOTE SPEECH

KS 1

FROM SARS TO MERS AND EBOLA

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The explosive epidemic of Severe Acute Respiratory Syndrome coronavirus (SARS-CoV) within 6 months in 2003 has affected over 8000 patients with 10% fatalities. The source of this epidemic was traced to wild life market civets and raccoon dogs, and finally to the Chinese horseshoe bats (*Rhinolophus sinicus*). This important finding has sparked an intensive hunt for emerging viruses in human and animals. Novel human coronaviruses NL63 and HKU1 were soon discovered in patients with acute febrile respiratory illness with no known causes. At least another 40 animal coronaviruses were

found in bats, birds and other domestic or wild animals including dolphins. Notably in 2006, the bat coronavirus HKU4 was discovered in the lesser bamboo bat (*Tylonycteris pachypus*) and bat coronavirus HKU5 was found in Japanese pipistrelle bat (*Pipistrellus abramis*) with their virus genomes fully sequenced. Since 2012, the Middle East Respiratory Syndrome coronavirus (MERS-CoV) has affected over 800 patients with 34% mortality after emerging in Saudi Arabia. This novel virus is phylogenetically closely related to the bat coronavirus HKU4 and HKU5. All these MERS patients have either resided in or travelled to the Middle East where human and camels are often in close contact. Only few cases had clear exposure history to camels while secondary cases were often traced to health care facilities. The natural reservoir of MERS-CoV remains elusive but many camels have been found to be shedding of MERS-CoV in the nasopharynx or have high serum antibody titre against the virus which could serve as the continuous source of animal-to-human transmission. While MERS is still lingering in Middle East, another explosive epidemic of Ebolavirus Disease is still continuing in West Africa where bushmeat hunting is prevalent. Besides the close human-animal interface in wild life market or camel transportation, respiratory droplet spread also facilitates the emergence and dissemination of SARS and MERS. Though Ebolavirus spread mainly by contact with blood and body fluid, the poor health infrastructure, lack of awareness or non-compliance to infection control measures, and media transparency in the affected localities may also affect the control of Ebolavirus disease.

KS 2

THE CHANGING FACE OF *ACINETOBACTER BAUMANNII* EPIDEMIOLOGY AND ITS CONTROL ISSUE

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Multi-drug resistant (MDR) Gram-negative pathogens have become a threat to many countries in Western Pacific Region. The ESKAPE pathogens (*Enterococcus faecium*, *Staphylococcus aureus*, *Klebsiella pneumoniae*, *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and *Enterobacter* species) are responsible for a substantial percentage of healthcare-associated infections and represent the vast majority of isolates with resistance to antimicrobial agents, thus creating serious therapeutic dilemmas for physicians. These microorganisms are difficult to treat and pose challenges for prevention and control strategies, particularly in setting where resources are limited. Much of the emergence and spread of MDR pathogens can be contributed to the non-judicious use of broad-spectrum antibiotics and poor adherence to infection control program. In this talk, I will discuss the changing face of *Acinetobacter baumannii*, the most common nosocomial infection in Thailand, as well as its control issues.

KS 3

PREVENTION AND CONTROL OF MDR-*ACINETOBACTER BAUMANNII*: EVIDENCE AND CHALLENGE

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No abstract.